High Voltage Delivery Service Credit Computation (REVISED)
Marginal Cost-Based Analysis

Customers At or Above 69,000 Volts Excluding Customers Eligible for Rider ZSS

Cost to Serve ($/kW):

$Y = (2062 \times X^{-0.7854})$ $/kW
See p. 2 of this Exhibit 115.1 (fitted curve)

Cost to Serve (area under the curve in MW-$/kW):

$\int Y = \int \{2062 \times X^{-0.7854}\}$
$\int Y = \{2062 \times X^{(-0.7854 + 1)}\} \div \{-0.7854 + 1\}$
Area from 0.1 MW to 95.4 MW = 19,692.5 (MW-$/kW)

Customers Below 69,000 Volts Excluding Customers Eligible for Rider ZSS

Cost to Serve ($/kW):

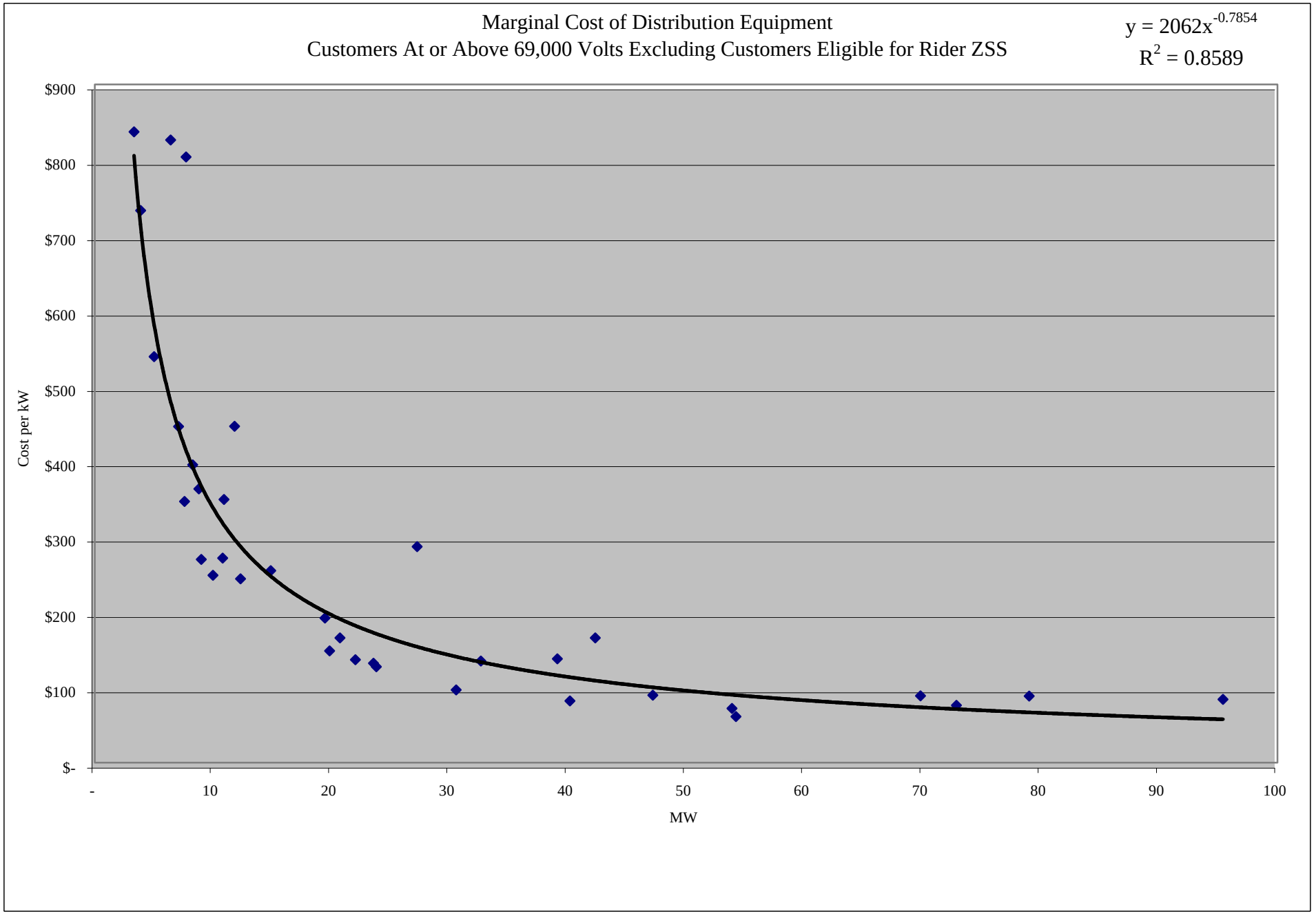
$Y = \$409.91 / kW$
See p. 3 of this Exhibit 115.1 (weighted average cost)

Cost to Serve (area under weighted average cost line in MW-$/kW):

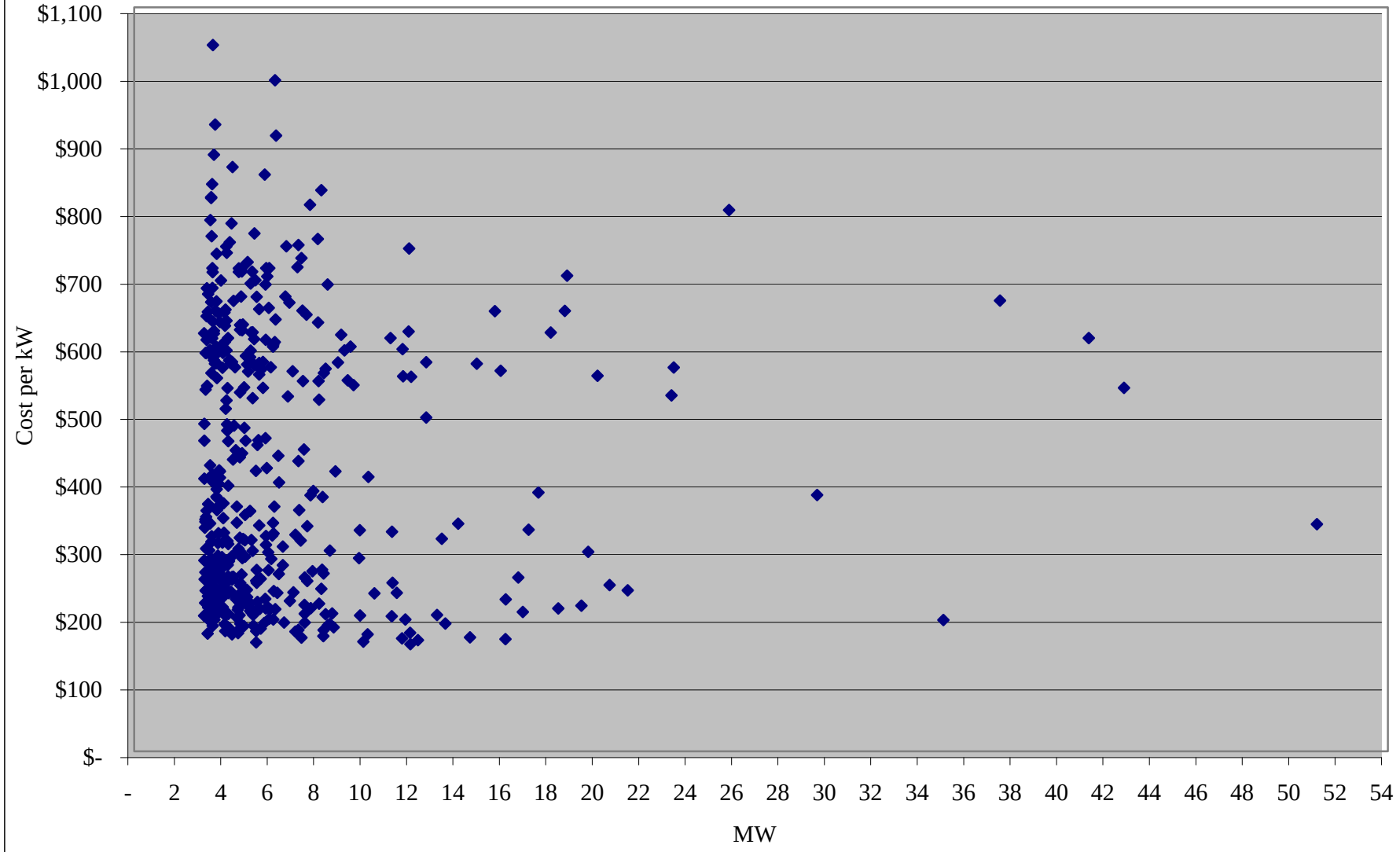
$\int Y = \int 409.91$
$\int Y = 409.91 \times X$
Area from 0.1 MW to 95.4 MW = 39,064.4 (MW-$/kW)

Credit Computation:

Credit Area = 39,064.4 (MW-$/kW) – 19,692.5 (MW-$/kW)
= 19,371.9 (MW-$/kW)
X-axis Length = 95.4 MW – 0.1 MW
= 95.3 MW
Y-axis Length = Credit Area ÷ X-axis Length
= 19,371.9 (MW-$/kW) ÷ 95.3 MW
= $203.27/ kW
Add General Plant at 7.8%:
= ($203.27 / kW) × 1.078
= $219.13 / kW
See ComEd Exhibit 13.1 at p. 44
Determine Annual Marginal Revenue Requirement (ALPCC = 0.1174):
= $219.13 / kW × 0.1174
= $25.73 / kW
See ComEd Exhibit 13.1 at p. 44
Determine Marginal Monthly Credit:
= {$25.73 / kW} ÷ 12
= $2.14 / kW


Marginal Cost of Distribution Equipment
Customers At or Above 69,000 Volts Excluding Customers Eligible for Rider ZSS
y = 2062x^-0.7854
R^2 = 0.8589
Cost per kW
$900
$800
$700
$600
$500
$400
$300
$200
$100
$-
-
10
20
30
40
50
60
70
80
90
100
MW

Marginal Cost of Distribution Investment
Customers Below 69,000 Volts Excluding Customers Eligible for Rider ZSS



Customers with demands at or above 3 MW
Weighted average cost: $409.91/kW